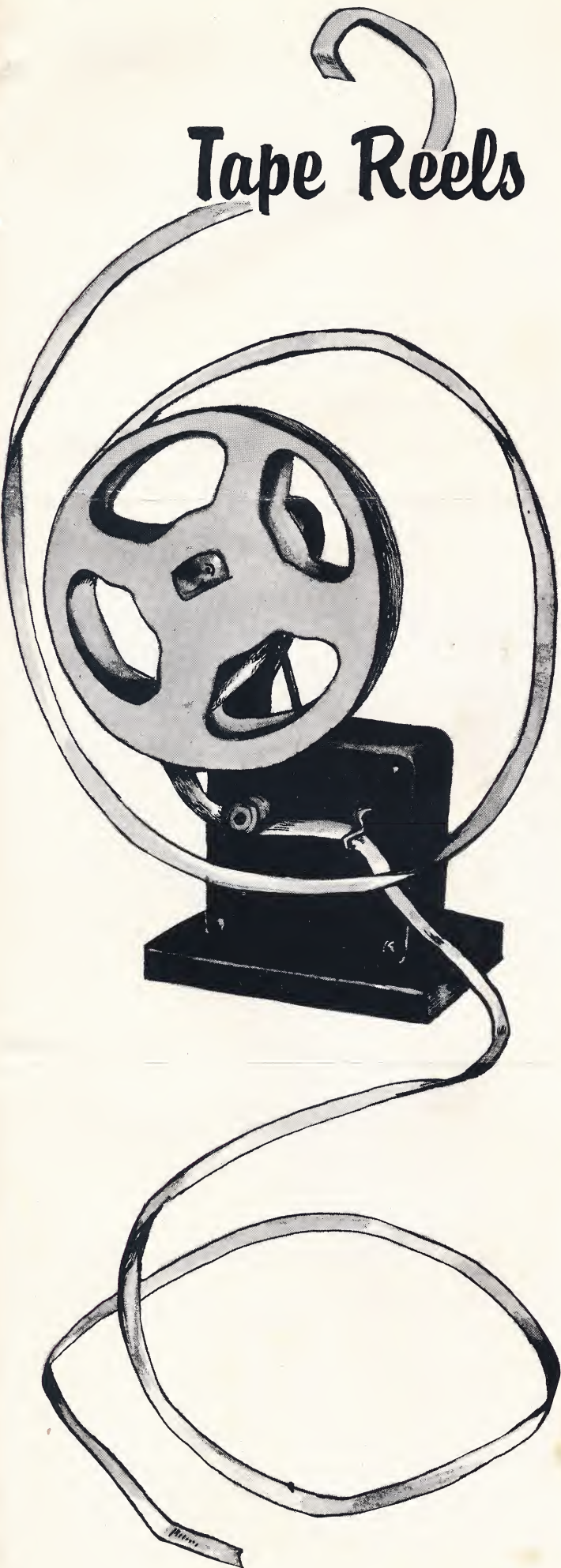


13 Split flanges, p. 4
Also vari-width tape reel, p. 4
Tape Winders

Tape Reels

Tape Pullers

and Accessories



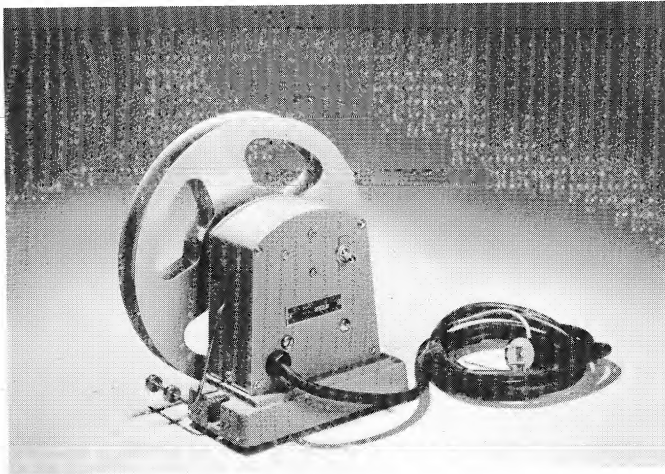
BUNNELL

Manufacturers of
Communications and
Electronic Equipment

Since 1873

J. H. **BUNNELL & Co.**

920 ESSEX STREET, BROOKLYN, N. Y. 11208



TYPE 3-9

• APPLICATIONS

Data Processing
Teletype
Stock Market

Automatic Type Setters
Business Machines
Automation

• *TAPE SIZES

11/16, 7/8 or 1" on same reel. By reassembling spacers provided on reel, width of reel can be changed. In case of paper tape width changes, same reel can be modified for above tape widths.

• SPECIAL FEATURES

FULLY AUTOMATIC—Starting and Stopping motor under taut or loose tape conditions without tearing tape. Motor energized only during take up time.

MOTOR CONTROL—Motor controlled through mercury switch that never wears out.

SNAP ON REEL—Easy loading and unloading (for unwinding).

TAPE RE-EXAMINATION—Includes built in feature that allows wound tape to be pulled out for re-examination.

DIRECT RE-WINDING—Unit can be used, de-energized, as a take off spool for re-winding. Note—Tape must be fed directly off reel, by-passing guide arm.

A.C. LINE CORD—Line cord supplied with a 3 prong plug for installations having a three wire grounding receptacle. Where three wire receptacles are not available, unit is supplied with an adaptor to fit the standard 2 prong A.C. outlet.

• SPEED AND CAPACITY

Winds 200 ft. per minute at the core equivalent to 24,000 characters per minute.

8 inch reel holds 900 ft. of .004 in. perforated tape. Other reel sizes available on special order.

• TAPE TYPES

Perforated, chad or chadless. Printed tapes.

• *REEL TYPES

1. Unit is supplied as shown with J.H.B. Standard 8" Reel. Reel can be supplied with tabs on each reel flange so that

*Specify Tape Width, and Reel Type per above.

TYPE 3-9 Continued

paper tape can be removed from core when outer reel flange is removed (Core dia. with tabs—3") or reel can be supplied without tabs but with a 1 1/2" slotted core. Slotted core allows reel to take-up more tape but tape cannot be removed too easily from core.

When ordering, specify with or without tabs.

2. Unit can be supplied with 8" NAB reel and hub. Paper tape cannot be removed from core with an NAB reel (core diameter 4 1/2"). When ordering specify NAB reel.

• FINISH

Dark Gray Vinyl texture. Other finishes available on large quantity orders.

• POWER REQUIREMENTS

115 Volt 60 c.p.s. Single Phase

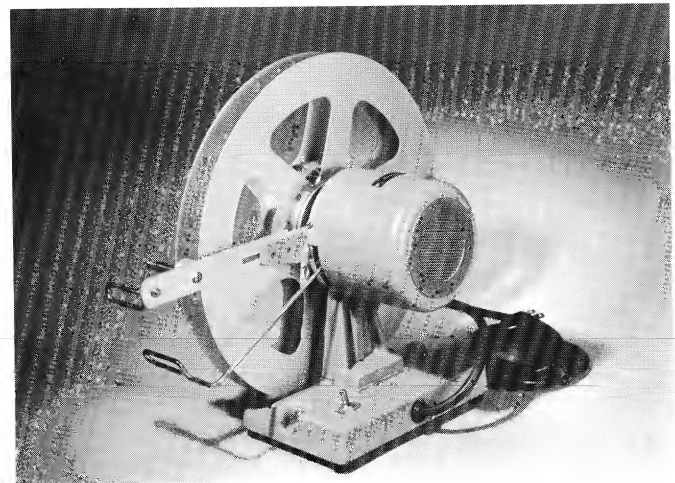
Input—16 Watts

Motor—Shaded Pole—Continuous Duty Stalled Torque Operation.

• PHYSICAL DIMENSIONS

Length—8 1/2"
Width—5/8"

Height—9"
Net Wt.—5 3/4 lbs.



TYPE 3-15

• APPLICATIONS

Data Processing
Teletype
Stock Market

Automatic Type Setters
Business Machines
Automation

• *REELS AND SIZES

Used with 10 1/2" or 12" reel diameter in any widths 11/16", 7/8" or 1".

Unit can be supplied with—

1. J.H.B. Standard Non-Collapsible Reel—#130760
2. J.H.B. Special Collapsible Reel—#130800
3. NAB Reels & Hub—#130770

Unit shown with NAB Reel & Hub.

For complete description on reels, request brochure.

• SPECIAL FEATURES

FULLY AUTOMATIC—Starting and Stopping motor under taut or loose tape conditions without tearing tape. Motor energized only during take up time.

Type 3-15 Continued

MOTOR CONTROL—Motor controlled through mercury switch that never wears out.

TAPE RE-EXAMINATION—Includes built in feature that allows wound tape to be pulled out for re-examination.

REMOVABLE REELS—Reels can be removed from winder hub for storage or other purposes. No indexing reels to hubs.

TENSION REGULATOR—Snubber provided to adjust winding tension of tape on reel while still maintaining low tension at input.

PANEL MOUNT—Units can be supplied for panel mounting. Ask about our Spooler Type 3-15S.

*Specify size and type of reel desired and width of tape used.

• SPEED

Winds 15" per second at the core equivalent to 150 characters per second.

• TAPE TYPES

Perforated, chad or chadless. Printed tapes.

• FINISH

Dark Gray Vinyl texture. Other finishes available on large quantity orders.

• POWER REQUIREMENTS

115 Volt 60 c.p.s. Single Phase

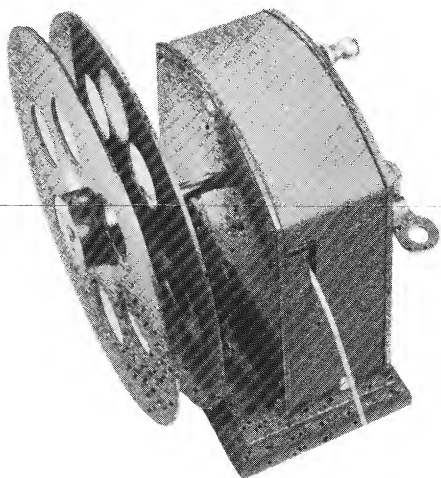
Input—14 Watts

Motor—Shaded Pole geared down—Continuous Duty—Stalled torque operation.

• PHYSICAL DIMENSION

Length—13" (less reel)
Width—7 1/2"

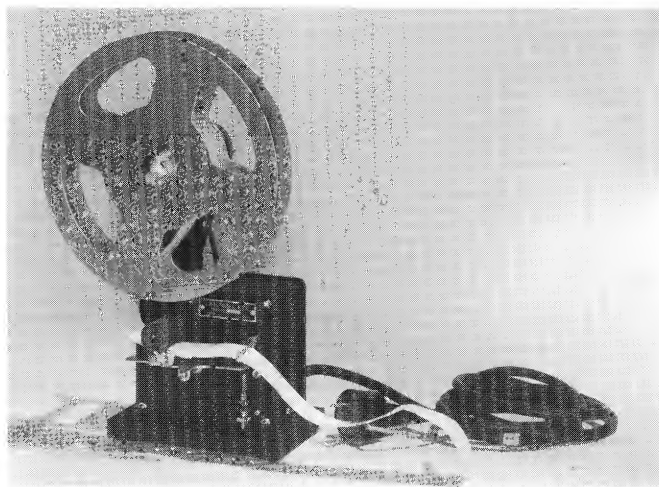
Height—9" (less reel)
Net Wt. 6 3/4 lbs.



MECHANICAL TAPE WINDER

Type 3-1

Used in brokers' and similar business offices for winding tape from tickers and tape printers. Also used in telegraph offices for winding printer or perforated tape. Entirely mechanical in operation. Has automatic cutoff that halts winding when tape becomes taut. Reels full spool capacity of 475 feet of tape with one winding of clock mechanism. Standard reel can accommodate tape 1/2" or 3/4" in width. Reels to accommodate other tape widths can be provided on order.



TYPE 36

• PULLER-WINDER COMBINATION FOR NEW HIGH SPEED TICKER

• APPLICATIONS

Data Processing
Teletype
Stock Market

Automatic Type Setters
Business Machines
Automation

• TAPE SIZES

11/16, 3/4, 7/8 or 1" on same reel.

By reassembling spacers provided on reel, width of reel can be changed. In case of paper tape width changes, same reel can be modified for above tape widths.

• CONTROL

Adjustable tension by lead screw.

• SNAP ON REEL

Easy loading and unloading (for unwinding)

• TAPE RE-EXAMINATION

For tape re-examination pull off spring belt unwind tape, when finished—rewind and snap belt back on pulley.

• SPEED

Pulls approximately ten and one-half feet per minute pull tension adjustable.

• POWER REQUIREMENTS

115 Volt 60 c.p.s. Single Phase

Input—16 Watts

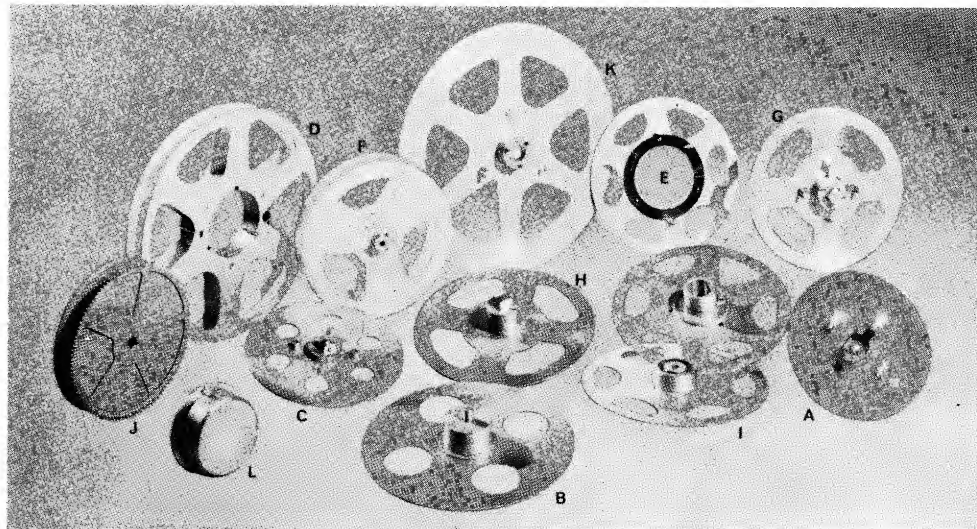
Motor—Shaded Pole—Continuous Duty Stalled Torque Operation.

• PHYSICAL DIMENSIONS

Length—9"
Width—5"

Height—13 1/4"
Net Wt.—5 lbs.

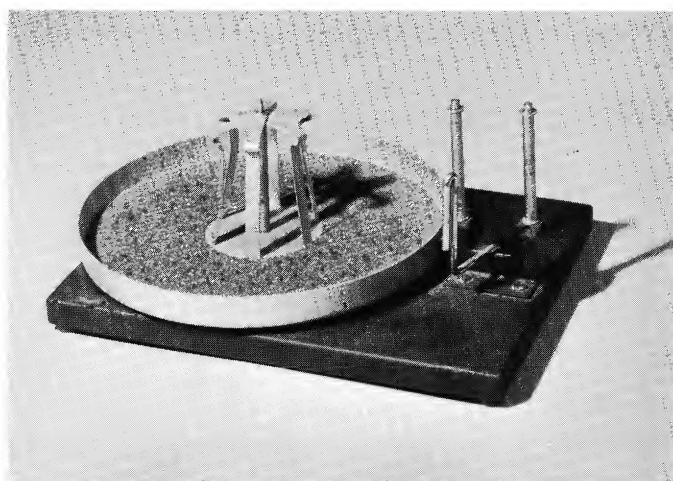
* Puller Model #63 same as above less winding attachment.



- (A)¹ **Ball Lock Reel**
Removable front face for easy removal of tape, with 4 pins forming a 3" hub, for center unwind. Satin brushed and clear anodized.
- (B)¹ **Supply Reel**
Specially designed with triple thread, 3/8-16 for quick removal of front face, with flick of wrist. Used as a supply reel with tapered core and spacers. Permits quick installation of tape rolls.
- (C)¹ **Reversible Reel**
May be used with either of two width tapes—reel takes 1" wide tape. When front face is reversed, will take 11/16" width tape.
- (D)³ **NAB Reel**
Obtained in a variety of widths and diameters, as specified. This reel is the standard, as used by the National Association of Broadcasters, (NAB). Satin brushed and clear anodized. Face not removable.
- (E)¹ **Magnetic Reel**
Same as NAB Reel (D), except face is held on by 3 magnets for easy removal of tape. Satin brushed and anodized.
- (F)³ **Plastic Reel**
Used with standard Teletype equipment. Made of plastic with two faces which can be readily separated.
- (G)¹ **TAB Reel**
Similar to Ball Lock Reel (A), except has 4 tabs for tape insertion. Satin brushed and anodized.
- (H)¹ **JHB Reel**
Similar to tab reel without tabs, and without pins — 1 1/2" core for maximum tape acceptance, can be used with 3-15 and 3-9 winders.
- (I)² **Clutch Reel**
A specially designed reel that can instantaneously be adapted for various size tapes. Front and rear faces of reel held together by a series of springs, easily removable or adjustable. Satin brushed and anodized.
- (J)³ **Geared Reel**
A high impact plastic geared reel with stainless steel center post. One face of reel is geared to mesh with drive mechanism. Primarily used in Olivetti Data Processing.
- (K)¹ **Spring-Clip Reel**
Reel designed to be held together with 3 spring clips. Easily removable and reset by pushing together. Satin brushed and anodized.
- (L)¹ **NAB-Hub**
An aluminum adapter, used to adapt a winder with 1/4" or 5/16" or 3/8" shaft to take a NAB reel. Satin brushed.

Model	Photo	Hub-Center Mtg.	Outside Diam.	Tape Width
Ball Lock Reel	A	1/4"	4"-6"-8"-10"-12"	1/2"-5/8"-3/4"-7/8"-1"
Supply Reel	B	1/4" Diameter	6"-8"-10"-12"	5/8"-3/4"-7/8"-1"
Reversible Reel	C	1/4" Diameter	6"-8"-10"-12"	11/16" to 1"
NAB Reel	D	NAB-Hub	6"-8"-10 1/2"-12" 14"	5/8"-3/4"-7/8"-1"
Magnetic Reel	E	NAB-Hub	6"-8"-10 1/2"-12" 14"	11/16"-7/8"-1"
Plastic Reel	F	1/4 "Shaft	7 1/2"	1"
TAB Reel	G	Same as Ball Lock	6"-8"-10"-12"	11/16"-7/8"-1"
JHB Reel	H	Same as Ball Lock	6"-8"-10"-12"	11/16"-7/8"-1"
Clutch Reel	I	1/4" Diameter	6"-8"-10"-12"	11/16" to 1"
Gear Reel	J	1/8"	6"	7/8"
Spring Clip Reel	K	1/4"	6"-8"-10"-12"	1/2"-5/8"-3/4"-1"
NAB-Hub	L	1/4"-5/16"-3/8"		

- Shows half of reel only in order to ascertain type of hub used. Supplied as a complete reel.
- Shows both halves separated to help observe type of clutch arrangement.
- Shows complete reel.



J.H.B. Unwinder

A mechanical device for unwinding tape, which has been spooled, in one operation. This unwinder feeds the inside center of the roll first, at any speed, so that the first message recorded comes out first, without the necessity of rewinding tape.

Unwinder has new braking device for controlling overruns and spillage.

NOTE:

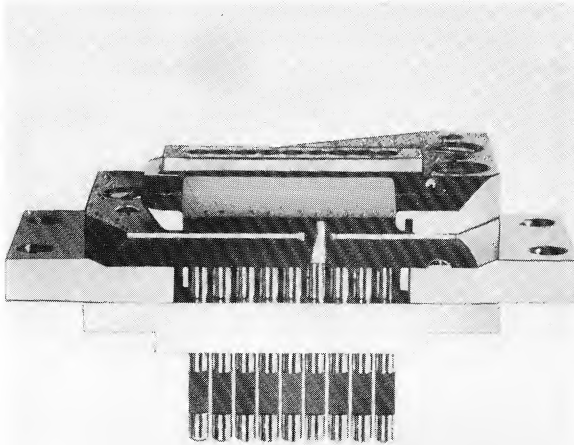
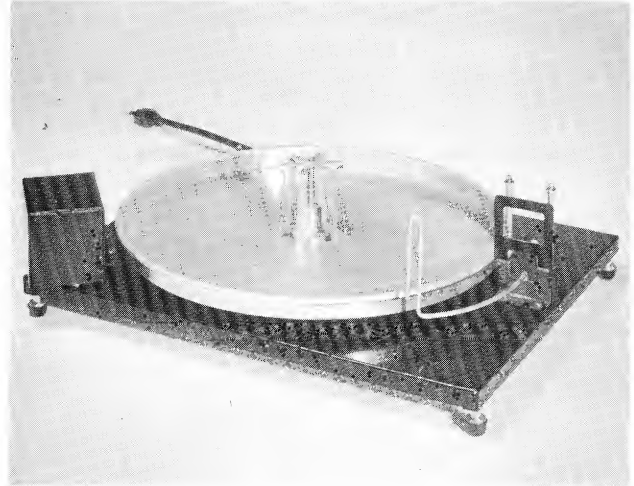
We manufacture special reels, winders, unwinders, combination "take up and supply" transports, and other requirements for data processing, to your requirement. Since the items vary, it is impossible to list all the styles and varieties required.

Send us your requirements.

J. H. BUNNELL & CO.
BROOKLYN, N. Y.

JUMBO MOTORIZED UNWINDER #4-200

Completely new, fully motorized 14" center tape unwinder, feeds from the center core so that the sequence of messages always reads in proper sequence, first message first. In view of the recent demand for large sized unwinders, J.H.B. has designed a JUMBO trouble free unwinder. This unwinder is set with a floating dancer arm, which starts and stops the motor in accordance with the speed at which the tape is being dispensed, thus eliminating all deterrents such as drag, overruns and spillage. The J.H.B. model 4-200 Jumbo Motorized Unwinder feeds up to 1200" of tape per minute and/or 12,000 characters per minute. Size: 18½ x 14½ x 5".

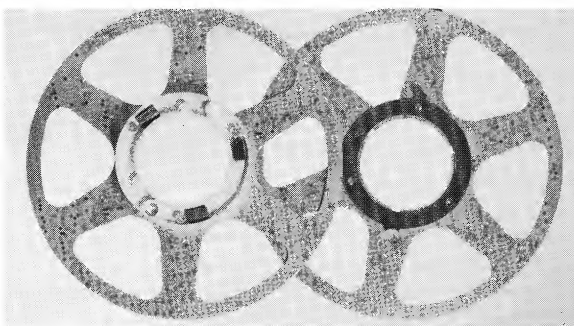
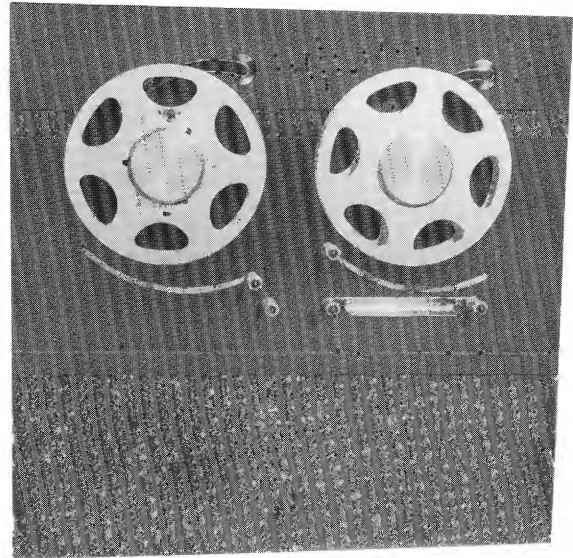


PUNCH HEAD MODEL #3-101

The J. H. Bunnell & Co. precision paper tape punch head is manufactured of the finest grade high speed tool steel, and is then hard chromium plated for maximum durability. The pin to hole tolerance is .0005 in order to eliminate any paper hole distortion or fuzz. This punch head, in a recent test, maintained its complete sharpness after 60,000,000 cycles. This can be purchased for different channel widths.

REVERSIBLE DUAL SPOOLER

The J. H. Bunnell & Co. Model 11-8, is a Bi-Directional trouble free Dual Spooler, which contains no belts, pulleys, differentials, clutches, or other device. It is operated by the use of two motors controlled by Dancer, Arms. The tape loop on each Dancer Arm commands its associated motor to take up the slack in the tape, to feed to the reader, or to maintain its position. Motor is controlled through mercury switch that never wears out. Motor energized only during take up time. Additional Dancer Arm controls the wind-up feed tension and automatically shuts off motion when reel 2nd" is loaded. Designed for universal use in installations requiring standard rack mounting. Spoolers may be table mounted. Spooler can take any tape size required, since it is designed so that it can be instantly adapted for tape width. Front and rear face and reel easily removable or adjustable. The "Bunnell" Spooler panel is large enough to accept any tape perforator, or tape reader, 3 inch or both. Reel accommodates paper or mylar tape — both chad or chadless. Speed is 24,000 characters per minute. Physical size is 19" x 24" — weight, approx. 24 lbs.



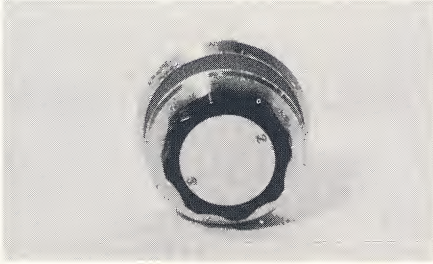
MAGNETIC REEL MODEL #3-300-E

The magnetic N.A.B. Reel is manufactured with a removable front face held on by three Alnico V Magnets. On this exclusive reel there is no need for indexing. The front flange can be removed and/or replaced instantaneously. This enables the rapid removal of the tape and replacement of the flange without any chance of error. This smart looking satin brushed and anodized reel can be had in 8", 10½", 12", or 14" diameter, and can carry tape widths between ¼" and 1". This is available in any color key desired. Please specify tape width and reel diameter when ordering.

J. H. BUNNELL & CO. BROOKLYN, N. Y.

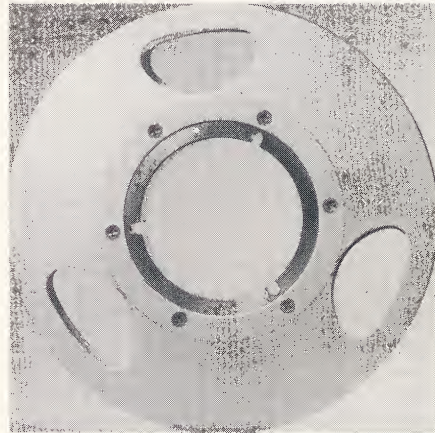
N.A.B. HUB MODEL #3-200

The N.A.B. Hub is a solid completely machined, close tolerance adapter. This is used to modify any data processing equipment with $\frac{1}{4}$ ", $\frac{5}{16}$ ", or $\frac{3}{8}$ " shaft, to accept a reel with a three inch center opening. This adapter will accept all N.A.B. reels and standardize all makes of equipment. The Bunnell N.A.B. hub is chamfered on the outer periphery in order to facilitate mounting. The N.A.B. Hub is fastened on the shaft by means of two easily accessible set screws. The N.A.B. Hub is beautifully satin brushed aluminum, to go smartly with any equipment.



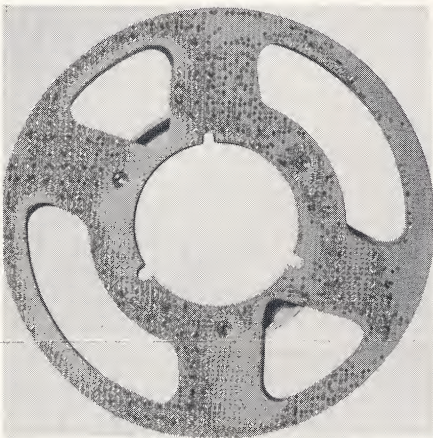
LOCKING TYPE HUB ADAPTER MODEL #3-201

The J. H. B. locking N.A.B. Hub has been designed for high speed processing units. This hub holds N.A.B. reels by means of a special rubber locking device that cannot damage any reel. Just a turn of the adjusting knob and the rubber expands to hold and grip any N.A.B. reel securely. A flick of the knob releases the reel for easy removal.



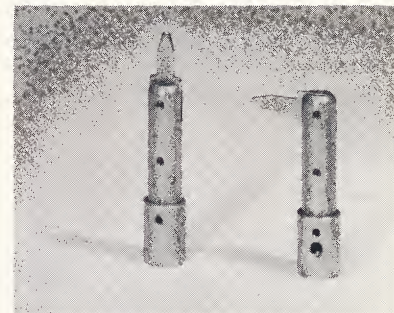
REELS TO MIL SPEC

J. H. Bunnell & Co. manufactures high precision N.A.B. reels to MIL-R-22842. Designed primarily for magnetic tape, this reel has solid aluminum hub and flanges. The reel is anodized to Government specifications. This reel is available in most tape width sizes between $\frac{1}{2}$ " and 2" and with reel diameters of 6-6 $\frac{1}{2}$ 7-8-10 $\frac{1}{2}$ and 14".



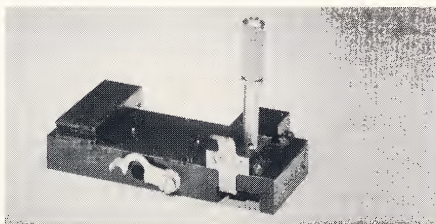
N.A.B. REEL MODEL #3-300-D

New! J. H. Bunnell & Co. low priced, high quality reels, come in 8", 10 $\frac{1}{2}$ ", 12" and 14" sizes. These low priced reels maintain a higher performance than more expensive ones. The reels contain a new type of rigid, light weight, cyclac, concentric hub to release weight pressure from the shaft. High quality, hand grained and anodized aluminum flanges are strong and unwavering, and blend with any equipment on which it is used. Reels can also be color anodized for color coding. Please specify tape width and reel diameter when ordering.



PLASTIC REEL ADAPTER 3-203

This unique toggle type adapter converts any machine, with $\frac{1}{4}$ " shaft, so that they can use standard Bunnell and/or Teletype soft plastic reels (see reel f). This adapter is a simple, easy to use accessory, which standardizes all machines, thus eliminating the necessity, bother, and trouble of rewinding. Just place it on the shaft and tighten the set screw. The reel can then be easily put on and off, and by the flick of the toggle. Made of hardened steel. Size 3 $\frac{1}{4}$ " x $\frac{5}{8}$ " OD. Reels also available.



TAPE PUNCH SPLICER MODEL #3-100

The Bunnell tape punch and splicer is a precision manual editing device for use on 5, 6, 7, or 8 channel tape. This fixture is an important, yet inexpensive, accessory which enables the user to correct all forms of punched tape. This instrument can be used with a minimum of time and effort, because the feeding is done from any point on the tape. It is unique in its simplicity and effective in its results.

J. H. BUNNELL & Company

ESTABLISHED 1873

MANUFACTURERS OF COMMUNICATION EQUIPMENT

920 ESSEX STREET

BROOKLYN, N. Y. 11208

NIGHTINGALE 9-1717

Gentlemen:

Your inquiry regarding our product which was shown in a recent magazine, has been referred to us. This product information is included in the enclosed brochure.

If you do not see what you need, the chances are that we have already manufactured it, although it is not illustrated. Our fully integrated electronic and machine shop has been designing and manufacturing various types of equipment for the past "93" years.

We have assisted Teletype, Univac, Western Union, Digitronics, and many others in the development and manufacture of their equipment; and we also supply them with our Peripheral Equipment.

Send us your requirements and find out about "J. H. Bunnell & Co." quality, delivery and price.

We thank you for your valued inquiry; please do not hesitate to call upon us for further information.

Very truly yours,

C. JACOBS
J. H. BUNNELL & COMPANY

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encl.